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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,382	02/28/2002	Tatsuya Tomaru		8164

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MATTINGLY, STANGER & MALUR, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

FLORES RUIZ, DELMA R

ART UNIT	PAPER NUMBER
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2828

DATE MAILED: 05/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,382

Applicant(s)

TOMARU ET AL.

Examiner

Delma R. Flores Ruiz

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


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TECHNOLOGY CENTER 2800

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

Fig. 6, characters 2, 3, 4, and 6.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 17 – 25 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are the second mirror for the cavity claimed.

Claims 17 – 25 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: The applicant doesn't explain where is a light source respect with the other element.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17 – 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoshima et al (5,815,519).

Regarding claims 17, Aoshima discloses a solid state laser comprising: a light source (Fig. 5, character 400, Column 11, lines 25 – 48), a first concave mirror (Fig. 5, Character 210, Column 11, lines 25 – 48) which passes selectively output light generated by said light source according to a wavelength; a gain crystal (Fig. 5, Character 103, Column 11, lines 25 – 48) having a garnet crystal structure (Column 5, lines 15 – 20, Column 8, lines 25 – 34 and Column 9, lines 57 – 62), which is pumped up by the light that has passed said first concave mirror; a cavity having said gain

crystal as a main element thereof and a lens (Fig. 9A, Character 432 Column 13, lines 30 – 38), which is tilted from a line of transmitted direction of the pump light in order that laser operation in said cavity is Kerr-lens mode locked (Column 5, lines 15 – 20, Column 9, lines 57 – 62 and Column 10, lines 36 – 40).

Regarding claims 18, 20 and 23, Aoshima discloses a solid state laser comprising; a second (Fig. 5, Character 220, Column 11, lines 25 – 48) and third (Fig. 5, Character 633, Column 11, lines 25 – 48) concave mirror which are arranged to focus the light oscillated in said cavity in said gain cavity; an end mirror ((Fig. 5, Character 510) which reflects the light oscillated in said cavity and an output (Fig. 5, Character 520) which passes a part of the light oscillated in said cavity as output laser light.

Regarding claim 19, Aoshima discloses a solid-state laser comprising a means for compensating for a dispersion which is generated in said gain crystal (Abstract, Column 1, lines 29 – 37, Column 2, lines 15 – 42, Column 5, lines 30 – 37, and Column 8, lines 35 - 51).

Regarding claims 21 and 24, Aoshima discloses a solid-state laser comprising; a compensating means is a pair of prism (Fig. 5, Characters 311 and 321, Column 1, lines 29 – 37, Column 2, lines 15 – 42, Column 5, lines 30 – 37, Column 8, lines 35 – 51 and Column 11, lines 31 – 42).

Regarding claims 22 and 25, Aoshima discloses a solid state laser comprising; a second concave mirror which is arranged to focus the light oscillated in said cavity said gain crystal (Fig. 5, Character 220, Column 11, lines 25 – 48) and a prism for compensating for dispersion which is generated in said gain crystal (Fig. 5, Characters 311 and 321, Column 1, lines 29 – 37, Column 2, lines 15 – 42, Column 5, lines 30 – 37, Column 8, lines 35 – 51 and Column 11, lines 31 – 42).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (703) 308-6238. The examiner can normally be reached on M - F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.


Delma R. Flores Ruiz
Examiner
Art Unit 2828


Paul Ip
Supervisor Patent Examiner
Art Unit 2828

DRFR/PI
April 26, 2002